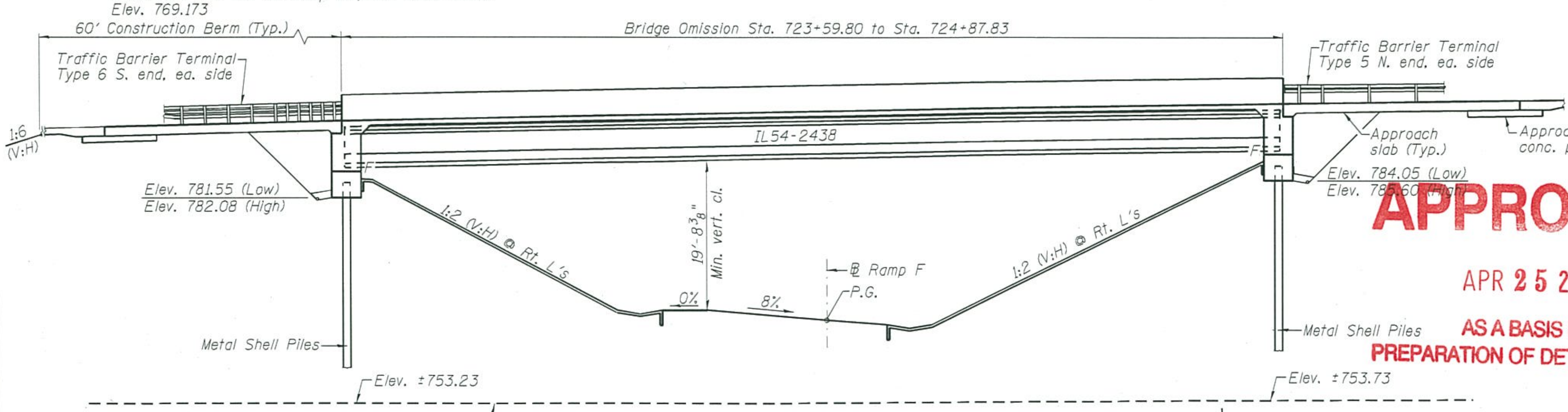
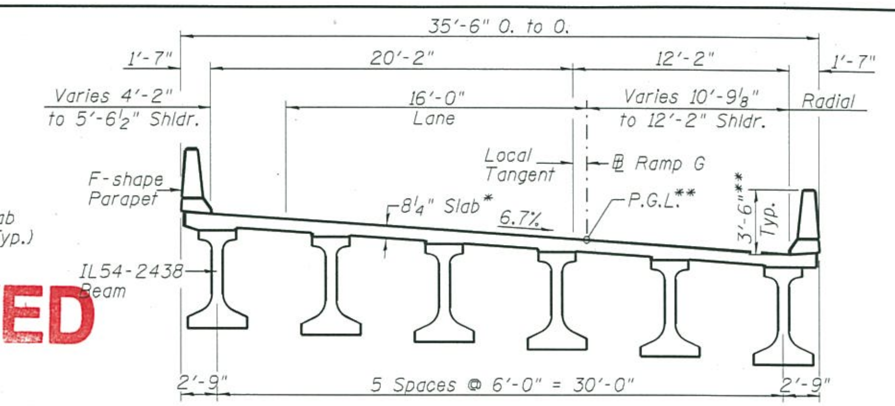
Bench Mark: Chiseled "□" on top of N.W. corner of light pole foundation #50-107 on Ramp DB, Sta. 1068+46.46 Elev. 769.173

Existing Structure: None   No Salvage



ELEVATION

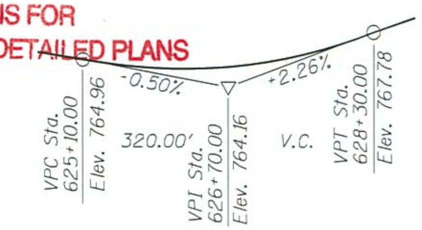
Note:
Up to 1/4" may be ground off the bridge deck and the bridge approach slab.



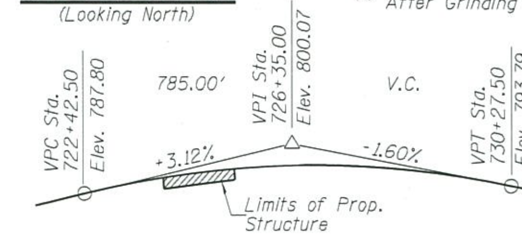
CROSS SECTION
(Looking North)

* Prior to Grinding
** After Grinding

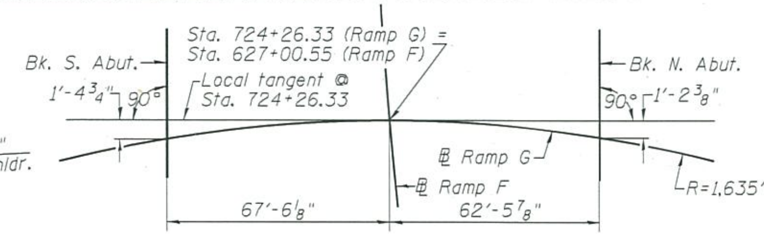
APPROVED
APR 25 2017
AS A BASIS FOR PREPARATION OF DETAILED PLANS



PROFILE GRADE RAMP F
(Along Ⓟ Roadway)



PROFILE GRADE RAMP G
(Along Ⓟ Roadway)
Note: The profile grade shows the final elevations after grinding.



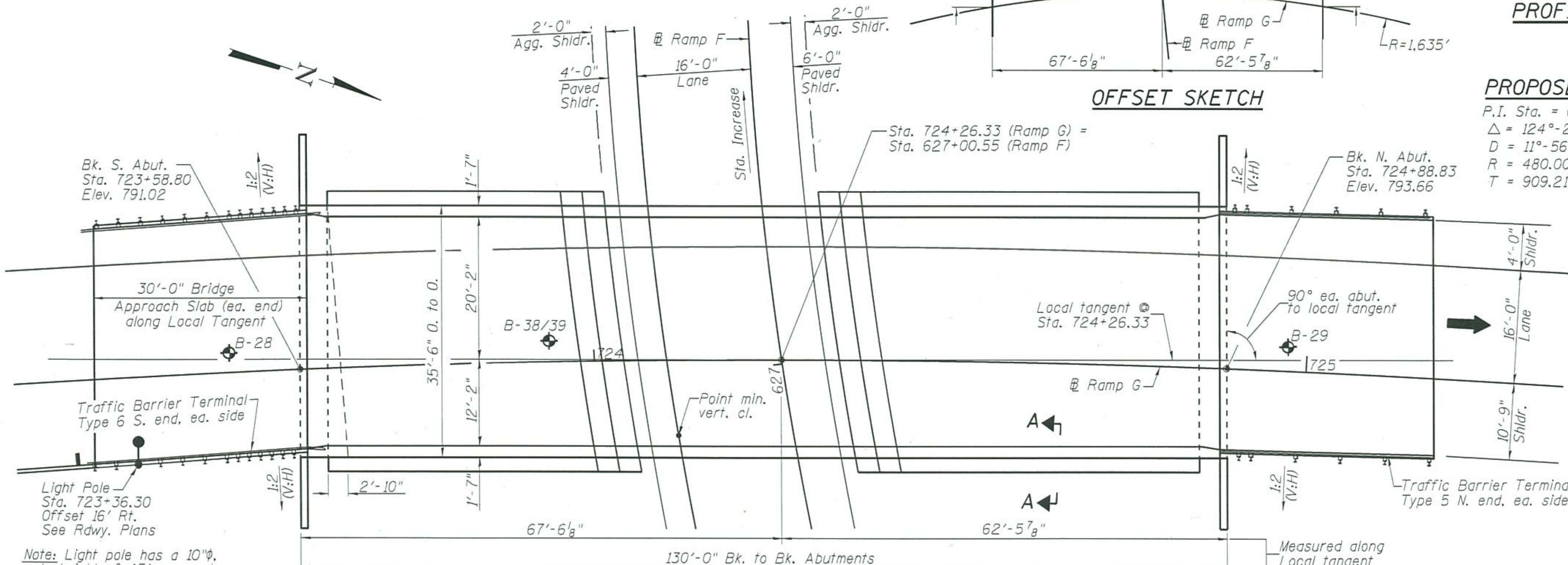
OFFSET SKETCH

PROPOSED RAMP F CURVE DATA

P.I. Sta. = 630+93.16   L = 1041.65'
Δ = 124°-20'-18" (Rt.)   E = 548.14'
D = 11°-56'-12"   S.E. = 8.0%
R = 480.00'   P.C.C. Sta. = 621+83.95
T = 909.21'   P.C.C. Sta. = 632+25.60

PROPOSED RAMP G CURVE DATA

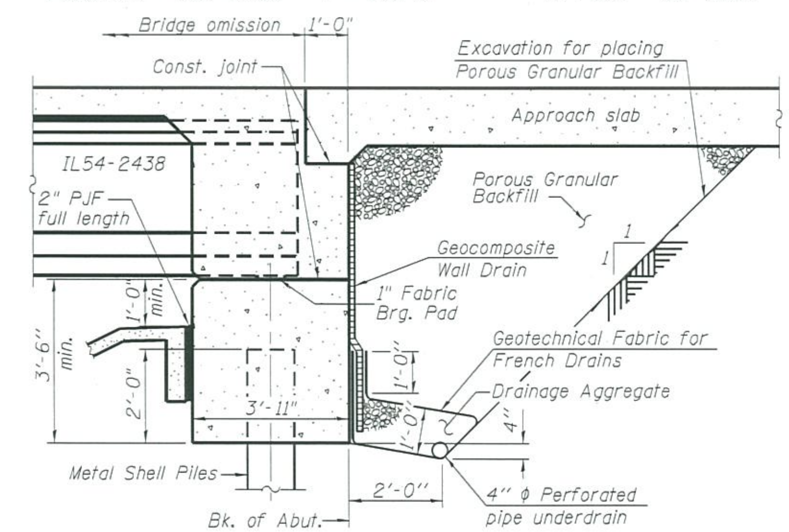
P.I. Sta. = 730+86.74   L = 1,736.70'
Δ = 60°-51'-35" (Rt.)   E = 261.20'
D = 3°-30'-16"   S.E. = 6.7%
R = 1,635'   P.C. Sta. = 721+26.34
T = 960.40'   P.T. Sta. = 738+63.05



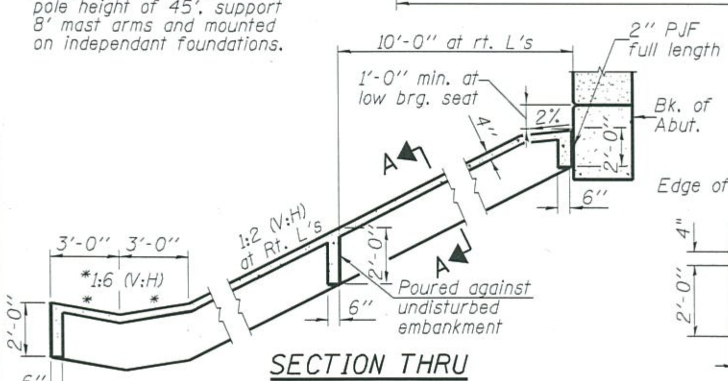
Note: Light pole has a 10"ϕ, pole height of 45', support 8' mast arms and mounted on independant foundations.

PLAN

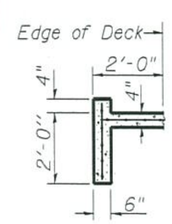
Boring Location



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



SECTION THRU CONCRETE SLOPEWALL



SECTION A-A

LOADING HL-93
Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS
2014 AASHTO LRFD Bridge Specifications, 7th Edition w/2015 & 2016 Interims

HIGHWAY CLASSIFICATION

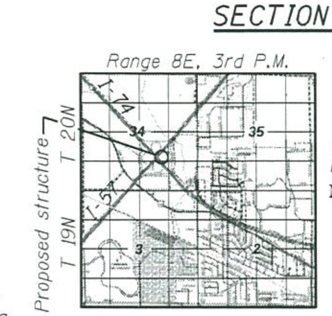
FAI 57/74 - Ramp F	FAI 57/74 - Ramp G
Functional Class: Interstate Ramp	Functional Class: Interstate Ramp
ADT: 3,300 (2013); 4,950 (2040)	ADT: 2,100 (2013); 2,650 (2040)
ADTT: 901 (2013); 1,351 (2040)	ADTT: 365 (2013); 461 (2040)
DHV: 360	DHV: 235
Design Speed: 40 m.p.h.	Design Speed: 55 m.p.h.
Posted Speed: 40 m.p.h.	Posted Speed: 55 m.p.h.
One-Way Traffic	One-Way Traffic
Directional Distribution: 100% NB	Directional Distribution: 100% WB

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi (Cast-in-Place)
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS
f'c = 8,500 psi
fci = 7,000 psi
fpu = 270,000 psi (0.6" ϕ low lax strands)
fpbt = 202,300 psi (0.6" ϕ low lax strands)

SEISMIC DATA
Seismic Performance Zone (SPZ) = I
Design Spectral Acceleration at 1.0 sec (SD1) = 0.135g
Design Spectral Acceleration at 0.2 sec (SDS) = 0.233g
Soil Site Class = D



LOCATION SKETCH

GENERAL PLAN
RAMP G OVER RAMP F
F.A.I. RTE. 57/74
SECTION (10-34-1)HBK
CHAMPAIGN COUNTY
STATION 724+26.33
STRUCTURE NO. 010-1002

CMT

USER NAME = Christopher Whitfield	DESIGNED CJW	APR 2017	REVISED
...\D570897-NEW TSL_Ramp G over F-1.dgn	CHECKED WLB	APR 2017	REVISED
PLOT SCALE =	DRAWN GLD	APR 2017	REVISED
PLOT DATE =	CHECKED CJW	APR 2017	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. OF SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

CONTRACT NO.
ILLINOIS FED. AID PROJECT